

Albuquerque Fire Department Fire Marshal's Office

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Adoption of an Updated Fire Code for the City of Albuquerque And Summary of the Proposed Code Changes

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Purpose

Update the City of Albuquerque's Fire Code in an effort to achieve the following goals:

- To protect the Citizens of the City of Albuquerque with the most up-to-date fire and life safety codes possible.
- To improve standards for firefighter safety and survival.
- To avoid inefficiencies in the code regulatory system. If this code is not adopted, design professionals and contractor will increasingly seek variances to permit the use of design alternatives and technologies accepted by jurisdictions using more current codes.
- To ensure the City's Fire Department is in line with the State's Construction Industry and the City's Building and Safety Department with their recent adoption of the 2009 International Building Code.
- To allow architects, engineers, designers and contractors within New Mexico and throughout the United States to work with one consistent set and editions of codes when designing and constructing buildings and structures in New Mexico.
- To ensure this code package balances life and fire safety considerations with the potential economic impacts.

<u>Background</u>

As has been done in the past adoptions of the City's Fire Codes, the Albuquerque Fire Department again proposes the City of Albuquerque adopt a Fire Code based on the minimum requirements of the national "Model Codes" along with local amendments bundled into a single ordinance.

Model Codes are developed by standard organizations through a network of development committees with representatives from various affected entities, both government and private. This method allows the pooling of financial and intellectual resources to produce

codes that remain current and technically sound. The model code developers are constantly working to update their codes to incorporate latest research results and building technologies. These codes are typically updated on a three (3) year cycle.

The Current City of Albuquerque Fire Code (0-2005-034) was passed on April 18, 2005, and adopted the 2003, edition of the International Fire Code, which is published by the International Code Council (ICC) family of Codes and the 2003 edition, of the NPFA 101 Life Safety Code published by the National Fire Protection Association.

Since the adoption of the City's current fire code, the State of New Mexico's Construction Industries Division and the City of Albuquerque's Building and Safety Division have been through two code revisions, adopting the 2006 International Building Code (IBC) in 2007, and most recently the 2009 IBC, The IBC is also published by the International Code Council is a companion document of the International Fire Code and part of the ICC's Family of Codes.

The New Mexico State Fire Marshal's Office, under the authority of the State Public Regulation Commission (PRC) is currently in the Process of adopting the 2009, edition of the International Fire Code as the State's Fire Code.

Model Fire Codes to be Adopted

- (1) The International Fire Code (IFC), 2009 Edition, including Appendices D and F, with local amendments.
- (2) All National Fire Protection Codes, Standards and Supplements, as published by the National Fire Protection Association (NFPA) Referenced in the (IFC) 2009 Edition.
- (3) NFPA 101 Life Safety Code, (LSC) 2009 Edition as published by the National Fire Protection Association. Chapters 2, 3, 4, 6, 7, 8, 9, 10, 11, 13, 15, 17, 19, 21, 23, 26, 29, 31, 33, 37, 39, 40, & 42) as applicable to Existing Structures and Facilities built prior to July 1, 2004, except Chapter 13 Section 13.3.5

Summery of Significant Changes

This commentary is a section by section analysis of the proposed ordinance summarizing the amendments and changes made from the 2009, International Fire Code (IFC). Some of the amendments are for clarification and do not change the code, some sections are added to avoid any ambiguity where the interpretation is left to the reader. In addition there are totally new sections and chapters added to the code to address areas not regulated in the IFC—to include a chapter dedicated to Inspection fees and rates. The Existing Chapters of the 2009, NFPA Life Safety Code are adopted without any amendments.

As per Section 4. Amendments.

"The International Fire Code is hereby amended as set forth in Exhibit A and subject to the modifications, additions or deletions therein. When an existing section number of the International Fire Code is referred in Exhibit A, the text therein shall control. When a new chapter, section or subsection is referred to in Exhibit A, it shall be added to the International Fire Code as adopted in Section 1 of this Ordinance".

EXHIBIT A

Chapter 1 Scope and Administration

IFC Chapter 1 was deleted in its entirety and replaced with new Chapter 1 "Scope and Administration" in order to adopt this code as the "City Of Albuquerque Fire Code" and address many of the administrative and management functions that are unique to the Albuquerque Fire Department and the Fire Prevention Bureau.

- Section 108 Board of Appeals was modified to come in line with the intent of the IFC providing an objective forum for settling disputes regarding the interpretation of the code requirements.
- Section 113 Fees was moved to a new Chapter, "Chapter 50 Required Inspections, Fees and Rates".
- Section 114 Standby Personnel/Fire Watch is a new section that was added to clarify when standby or fire watch is required. It also adds qualification, duties and responsibilities required for persons conducting fire watch.

Chapter 2 Definitions

 Several definitions were added to Chapter 2 to address words that have specific meaning for the City and define words that are added to other Chapters and Section of this code.

Chapter 3 General Precautions Against Fire

- Section 301 General. Language was added to direct the user to the Fees Schedule in Chapter 50 and to clarify the general application process for bonfires, commercial open flame cooking, indoor displays and vehicle displays.
- Section 302 Definitions were added that are specific to Chapter 3 to clarify and define open flame operations e.g. open burning, open flame performances and definitions of open space areas.

- Section 303 Asphalt Kettles. This section was added to ensure roofers or other contractors using these types of devices secure them at the end of the work day.
- Section 307 Open Burning, Recreational Fire and Portable Fireplaces. Language was added to detail when a permit is required for open burning and also brings the open burning requirements in line with (City Ordinance 0-2011-018), which gives the Fire Chief the authority to implement Burn Restriction and Burn Bans.
- Section 308 Open Flames adds language to clarify how much LP-gas is allowed in Group R Occupancies. It also details the requirement to perform with open flame device before an audience and also add a liability insurance requirement.
- Section 312 Vehicle Impact Protection adds detailed construction requirements for the protection of gas meters exposed to vehicular damage.
- Section 315 adds language that requires existing storage warehouses that are not designed with proper fire protection features to install signage that states "No Storage Above 12 Feet".
- Section 318 Commercial Open Flame Cooking Operations is a new section that provides regulations for outdoor cooking in areas accessible to the public (e.g. Chile Roasters). These requirements are intended to protect the public from the dangers to open flame heat sources and LP-gas (propane).
- Section 319 Outdoor Flame Performance is a new section that provides safety requirements for both the flame performers and the audience. It also requires that Liability Insurance be provided in the event of damage or injury.

Chapter 4 Emergency Planning and Preparedness

- Section 401 General adds a section on procedures to follow during fire alarm activation and when the alarm is allowed to be silenced. This requirement will make the party responsible at the protected facility to investigate the fire alarm before silencing the alarm.
- Section 405 Emergency Evacuation Drills adds semiannual evacuation drills for H occupancies (i.e. hazardous facilities) and their employees.
- Section 407 Hazardous Communications requires facilities that store or use hazardous materials have Material Safety Sheets for the hazardous materials stored or used readily available on the premise as a paper copy or on a USB Flash Drive.

Chapter 5 Fire Service Features

- Section 501 General reminds the reader that Appendix D of the IFC has been adopted as part of the Code for Fire apparatus access roads and fire lanes.
- Section 502 Definitions adds language to the fire lane definition to include parking lots and driveways.
- Section 503 Fire Apparatus Access Roads give the authority to the fire code official to require fire lanes for new and existing structures and facilities. It also adds language to the code that provides for the specific designs of fire lanes, which are left general or not addressed in the IFC. It also gives the fire department the authority to issue motor vehicle citations for parking in designated fire lanes. Requirements were also added for facilities that utilize security and controlled access gates.
- Section 505 Premises Identification adds requirements for both Group R
 Occupancies (apartment building, hotels, etc.) requiring 12 inch number for
 identifying the street address number. It also increases the size of street address
 number for other commercial building from 6 inch to 10 inch. There is also a
 height requirement for placement of the numbers depending on whether it is a one
 or two story building.
- Section 506 Key Boxes add language that clarify where key boxes are allowed to
 be mounted on a building and require that keys locked in the key box be marked
 as to what the keys open.
- Section 507 Fire Protection Water Supplies lets the reader know that fire flow requirement for structures and hydrants are found in City Development Process Manual. It also sets out requirements for an individual, firm or company to obtain a "Certificate of Fitness" as a requirement for the inspection and testing and maintenance of private fire hydrants.

Chapter 6 Fuel-Fired Appliances

• Section 603 Fuel-Fired and Systems adds language that directs the reader to Section 312.2.1 for the approved manner in which to protect gas meters.

Chapter 9 Fire Protection Systems

Section 901 General adds languages clarifying when permits are required to modify or remove a fire protections system. It also adds language that allows the fire code official to require fire watch for nuisance fire alarms or for fire protection system that are out of service.

- Section 903 Automatic Sprinkler Systems adds language requiring all new Group E (educational) occupancies install an automatic sprinkler system. It also adds to the Exception provision, allowing for buildings, which are under 12,000 sq/ft, avoid the sprinkler system requirement if a complete smoke detection system is installed. There is also language for the supervision and monitoring of sprinkler system in multi-tenant spaces.
- Section 903.6.3 Existing Assembly Occupancies adds requirements for existing Dance Halls, Discotheques, Night Clubs, Taverns and Bars to install an automatic sprinkler system within twelve (12) months from adoption of this code.
- Section 907 Fire Alarm and Detection Systems changes the requirements in Group A (assembly occupancies) 907.2.1 in the Exception provisions to install a complete smoke detection system if a choice is made not to install manual fire alarms. In Group E (educational occupancies) changes were made in the requirements in the Exception allowances.
- Section 912 Fire Department Connections language was added, which outlines where new fire department connections are to be installed. For existing buildings language was added for facilities that have fire department connections which are not visible from the street to provide signage on the building or facility directing the responding fire crews to the location of the connections.

Chapter 10 Means of Egress

• Section 1030 Maintenance of the Means of Egress language was added to detail the types of obstructions that are unlawful.

Chapter 22 Motor Fuel-Dispensing Facilities and Repair Garages

- Section 2205 Operational requirements language was added to establish a distance requirement for the use of matches, lighters and smoking and areas used for fueling of motor vehicles.
- Section 2206 Flammable and Combustible Liquid Motor Fuel-Dispensing Facilities establishes the types of above-ground storage tanks permitted in the City for fueling facilities.

Chapter 24 Tents and Temporary Membrane Structures

- Section 2403.2 Approval Required adds language requiring tents and membrane structures regardless of square footage, obtain permits from the Fire Marshal's Office. Exceptions were modified to exempt personal tents and membrane structures 100 sq/ft or less not used for commercial purposes. Language was also added for Locations, giving optional methods for preventing vehicles from parking within 20 feet of a tent.
- Section 2404.8 Fireworks increases the distance requirement from where fireworks can be discharged in relation from a tent.

Chapter 25 Tire Rebuilding and Tire Storage

Section 2505 Outdoor Storage adds language which will allow the fire code
official to reduce the distance requirements between lot lines and buildings and
the storage of smaller piles of tires. This will benefit small tire stores that are
located on smaller lots.

Chapter 27 Hazardous Materials

Section 2703 General Requirements adds language requiring facilities storing
hazardous materials, under the exempt amounts, to provide approved spill control
and containment methods to contain any spill from a leaking container. Language
was also added to require any hazardous material leaked or spilled in a spill
container be disposed of in accordance with Title 40 Part 261 of the Code of
Federal Regulations.

Chapter 33 Explosives and Fireworks

- Section 3301 General adds language under 3301.1.3 Fireworks under Exception 4., which refers the reader to Section 3309 for the possession, storage, sale, handling of consumer fireworks. This section also addresses that permit issued in Section 105.6 are only valid for the job or project specified in the permit. It also adds language for financial responsibility for blasting, fireworks displays and pyrotechnic special effects materials.
- Section 3302 Definitions adds several definitions for open space and wild lands areas.

- Section 3305 Manufacture, Assembly and Testing of Explosives, Explosive Materials and Fireworks prohibits these types of operations in the City of Albuquerque. Under Exceptions, an exception was added to allow for testing of explosives for companies or firms contracted with the DOD and an exception was added for the Motion Picture and Film Industry.
- Section 3307 Blasting language was added outlining the application process for obtaining a permit for blasting in the City. Safety requirements were also added for blasting in congested areas.
- Section 3308 Fireworks Display adds languages to clarify the application process for obtaining a fireworks display permit.
- Section 3309 Possession, Storage, Sales, Handling and Use of Consumer Fire Works adds language to bring the City's fireworks regulations in line with the State's Statute "Fireworks Licensing and Safety Act". It also adds language to the requirements for retail sales in Temporary Membrane Structures. Language was also added where fireworks may be discharged.

Chapter 34 Flammable and Combustible Liquids

- Section 3404 Storage adds requirement and limitations for installing above ground flammable and combustible storage tanks in the City limits.
- Section 3406 Special Operations adds requirements outlining requirements for above ground storage tanks on farm and construction projects.

Chapter 46 Fire Safety Requirements for Existing Buildings

• Section 4603 Sprinkler Systems adds requirements for existing Assembly Occupancies defined as Dance Halls, Discotheques, Night Clubs, and Taverns and bars with an occupant load 100 or more install a fire sprinkler system.

Chapter 47 Referenced Standards

• NFPA adds the National Fire Protection Association Standard 140-2008, Motion Picture and Television Studio as a referenced standard in this code.

Chapter 48 Place of Assembly

Chapter 48 is a new chapter added to the City's Fire Code. This chapter will require minimum requirements for trade shows, exhibitions, outdoor assembly events, outdoor mazes, special amusement building and covered mall buildings.

manufacturing facility will entail a much more detailed inspection due to more fire protection features required and the additional square footage, whereas a 1,000 square foot retail space typically will not have as many fire protection features and would not be as time consuming to inspect.

- Section 5003 Plan Review/Construction Permits remained the same.
- Section 5004 New Construction Inspection Fees were also adjusted—decreased for building with less square footage and increased for buildings over 12,001 square feet.
- Section 5005 Re-inspection fees remained unchanged.
- Section 5006 After hour inspection Rates remained unchanged.
- Section 5007 Fire Watch and Fire Safety Officer Standby Rates remained unchanged.
- Section 5008 Fire Safety Advisor Standby Rates will be determined by the industry.
- Section 5009 Fire Safety Training Fees for:
 - 1. Fire extinguisher training fee are increased and with a limitation on the number of persons per class.
 - 2. Film and Movie Fire Safety Course is new to the Fire Marshal's Office and is designed to provide training for both fire department personnel and other persons wanting to become Fire Safety Advisors for the Film and Movie Industry as per the requirement in Section 4911.1.
 - 3. Fire Watch Safety Course is new and is designed to provide training for those persons wanting to obtain a "Fire Watch Certificate of Fitness" as outlined in Section 114.5.
- Section 5010 Certificate of Fitness Fees are new and incorporated to recover the administrative cost of processing and issuing these certificates.
- Section 5011 Appeals to the Fire Board of Appeals adds a fee for the administrative costs of an appeals hearing.
- Section 5012 Copying Fees were added to reflect the City's Administrative Instruction 1-7
- Section 5013 Billing and Collection of Fees adds language detailing the billing and collection process and allows the Fire Department to send delinquent accounts to a Collection Agency.

Conclusion

Fire Prevention and Code enforcement are the first lines of defense in the protection of Life and Property within the City of Albuquerque from the dangers of fire, explosions and other life safety considerations.

The adoption of the 2009, Edition of the International Fire Code and the 2009 NFPA Life Safety Code 101, is essential for the following reasons:

- Provides for minimum requirements to protect the Citizens of City from the dangers and hazards of fire and explosions.
- Provides provision that will protect the citizens and the environment of the City from the dangers and hazards from the storage, use, and handling of hazardous materials.
- Will safeguard to a reasonable degree from other hazardous conditions that may arise in the use and occupancy of buildings and other premises.
- Provides regulations that will enhance firefighters' safety and survival.

With the adoption of the 2009 IFC, the Albuquerque Fire Department will, for the first time in six (6) years, be on the same page with the State's Construction Industry and the City's Building and Safety Section in their recent adoption of the 2009, International Building Code. This will provide for a more seamless plan review and inspection process for new construction in the City.

The proposed ordinance along with the 2009 IFC and 2009 NFPA LSC was reviewed by a committee of Certified Fire Prevention Officers, who researched these codes as well as other fire codes and ordinances adopted by cities in the Southwest similar in size to Albuquerque. The amendments and additions to the IFC will provide clarification to many processes and operations that are unique to the City.